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Montana Economy at a Glance  
July 2006

## Healthcare in Montana: In Short Supply?

By Brad Eldredge, Ph.D.

Concern in Montana has grown over the ability of the healthcare workforce to keep up with demand, especially given the aging of the baby boom population. According to the 2004 American Community Survey, Montana already ranks tenth in the nation in the percentage of the population over 65. This is an issue that has not escaped the attention of policymakers. The Martz administration put together a blue ribbon taskforce on healthcare workforce shortage. More recently, the Board of Regents and the State Workforce Investment Board formed taskforces to address healthcare workforce issues. The Research and Analysis Bureau has been working to provide data to these two committees to help inform their decision making process. This article presents some of the available labor market data regarding the healthcare workforce in Montana.

### Population to Healthcare Worker Ratios

One indicator of a healthcare shortage would be low ratios of healthcare workers to population. To determine how Montana stacks up to the nation, the Research and Analysis Bureau calculated a ratio of ratios called a location quotient. Here is an example of how a location quotient works. If there is one nurse for every 200 people in Montana (or 0.005 nurses per person), and one nurse for every 100 people in America (or 0.01 nurses per person), then Montana's location quotient for nurses would equal 0.005 divided by 0.01, or 0.5. Location quotients greater than one indicate more healthcare workers in Montana per population than nationally, while location quotients less than one indicate fewer healthcare workers per population than nationally. Since demand for healthcare is largely a function of population, a low location quotient could identify an occupation in short supply in Montana.

As Table One shows, half of the occupations included in the analysis had location quotients greater than one, while the other half had location quotients of one or less. All but three of the occupations had a location quotient of at least 0.8, indicating that for most healthcare occupations,

Montana has a reasonable amount of workers given its population. The exceptions were medical assistants, physical therapy assistants, and medical and clinical laboratory technicians.

The Standard Occupational Classification Manual states that medical assistants "perform administrative and certain clinical duties under the direction of a physician." According to the Bureau of Labor Statistics Occupational Outlook Handbook, the medical assistants occupation is expected to be one of the fastest growing occupations from 2004 to 2014. Medical Assistant numbers are projected to grow partially because physicians value their flexibility. Physical therapy assistants have the second lowest location quotient at 0.65. Interestingly, the state has a higher than expected number of physical therapists. Physical therapists are qualified to perform the duties of physical therapy assistants. Perhaps there has been less substitution

Table One.

Occupation	LQ
Medical Assistants	0.58
Physical Therapy Assistants	0.65
Medical and Clinical Laboratory Technicians	0.71
Occupational Therapists	0.83
Occupational Therapist Assistants	0.86
Dental Assistants	0.94
Diagnostic Medical Sonographers	0.94
Pharmacy Techs	0.95
Home Health Aides	0.97
Registered Nurses	1.00
Respiratory Therapists	1.06
Surgical Technologist	1.10
Medical and Clinical Laboratory Technologists	1.18
Family and General Practitioners	1.19
Nursing Aides	1.21
LPNs	1.24
Radiologic Technologists and Technicians	1.25
Pharmacists	1.27
Physical Therapists	1.34
Medical Records and Health Information Technicians	1.38
Dentists, General	1.43

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